

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2004/001842

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G01B 11/16 G02B 6/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G01B 11/00, 11/16, G02B 6/00, 6/36, 6/38

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 14-162211 A (MITSUBISHI HEAVY IND. LTD.) 7 Jun. 2002 see abstract; figures 3-6 and 12; paragraphs 21-29, 33	1-3, 5
Y	JP 11-173820 A (FURUKAWA ELECTRIC CO. LTD.) 2 Jul. 1999 see abstract; figure 1	1-3, 5
A	JP 14-286563 A (KYOWA ELECTRON INSTR. CO. LTD.) 3 Oct. 2002 see abstract; figure 2; paragraphs 41 and 45-49	1-6
A	JP 13-108416 A (MITSUBISHI HEAVY IND. LTD.) 20 Apr. 2001 see the whole document	1-6
A	JP 13-281471 A (GO CHISHIN and NTT INFRANET CO. LTD.) 10 Oct. 2001 see abstract	1-6
A	KR 2001-0016729 A (KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY) 5 Mar. 2001 see abstract; figures 1 and 2; pages 2-3	1-6

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

04 NOVEMBER 2004 (04.11.2004)

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 1994-0018675 A (SUMITOMO ELECTRIC IND. LTD.) 18 Aug. 1994 see the whole document	1-6
A	KR 1993-0008483 A (SUMITOMO ELECTRIC IND. LTD.) 21 May 1993 see the whole document	1-6

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/001842

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 14-162211 A	07/06/2002	NONE	
JP 11-173820 A	02/07/1999	NONE	
JP 14-286563 A	03/10/2002	NONE	
JP 13-108416 A	20/04/2001	NONE	
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KR 1993-0008483 A	21/05/1993	EP 537413 A1 CN 1071515 A JP 05-107423 A2 US 5247598 A DE 69226059 C0	21/04/1993 28/04/1993 30/04/1993 21/09/1993 06/08/1998